

IN THE CLAIMS:

The following listing of the claims replaces all earlier listings and all earlier versions.

1. ~~LED, in which~~ A light emitting diode, wherein at least one ~~LED~~ light emitting diode die (3) is arranged on ~~an LED PCB (6)~~ a light emitting diode printed circuit board with a die attach (4) and the ~~LED PCB (6)~~ light emitting diode printed circuit board has, on the side ~~opposite~~ opposite to the ~~LED~~ light emitting diode die (3), rear side contacts (7) which if appropriate are formed as plug contacts, ~~characterized in that~~ wherein the rear side contacts (7) cover over at least ~~the half~~ half the area, preferably the entire area apart from the necessary exceptions, of the ~~LED PCB~~ light emitting diode printed circuit board. (6). (Fig. 1-3)

2. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that~~ wherein the rear side contacts (7) are thermally, and if appropriate electrically, connected with the contact areas (~~conductor paths~~ 5) on the side of the ~~LED PCB~~ light emitting diode printed circuit board (6) towards the LED die, to the lateral side of the ~~LED PCB~~ light emitting diode printed circuit board. (Fig. 2)

3. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that~~ wherein the ~~LED PCB (6)~~ light emitting diode printed circuit board is a metal core board and ~~in that~~ wherein the ~~LED~~ light emitting diode die (3) is applied directly on to the metal core. (Fig. 3)

4. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that~~ wherein the ~~LED PCB (6)~~ light emitting diode printed circuit board is a metal core board and ~~in that~~ wherein there is arranged between the conductor paths and the metal core an electrically non-linear insulator material.

5. ~~LED~~ A light emitting diode according to ~~any of claims 1—4~~ claim 1, ~~characterized in that~~ wherein the LED die light emitting diode is mounted face down on the LED die.

6. ~~LED~~ A light emitting diode light source having one or more ~~LEDs~~ light emitting diodes according to ~~any of claims 1 to 5~~ claim 1 arranged on a board (9) or on a plug, wherein the board (9) has contact areas (~~conductor paths~~ 8), or the plug has contacts, with which the ~~LEDs~~ light emitting diodes are contacted, ~~characterized in that~~ wherein the rear side contacts (7) of the LEDs light emitting diodes are soldered with the contact surfaces or with the contacts on at least the half half the area of the LED PCB light emitting diode printed circuit board, preferably over the entire area apart from the necessary exceptions.
(Fig. 1)

7. ~~LED~~ A light emitting diode light source according to claim 6, ~~characterized in that~~ wherein a cooling body (11) is arranged on the rear side of the board (9). (Fig. 1)

8. ~~LED~~ A light emitting diode light source according to claim 7, ~~characterized in that~~ wherein the board (9) and/or the LED PCT (6) light emitting diode printed circuit board has through-contacts for increasing the thermal conductivity, whereby ~~preferably~~ the through-contacts have a diameter of less than 100 µm.